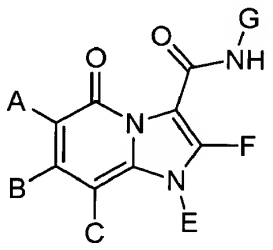
AMENDMENTS TO THE CLAIMS

Claim 1 (currently amended): A compound of the formula:



or a pharmaceutically acceptable salt thereof wherein:

A, B and C are independently selected from:

(i) hydrogen, halogen, C_1-C_6 alkoxy, C_1-C_6 haloalkyl, hydroxy;

(ii) C_1-C_6 alkyl, C_3-C_7 cycloalkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl,

where each alkyl, cycloalkyl, alkenyl, or alkynyl is optionally substituted with one or more of hydroxy, oxo, halogen, amino, C_1-C_6 haloalkyl, C_3-C_7 cycloalkyl, C_1-C_3 alkoxy, or mono- or di(C_1-C_6)alkylamino; and

(iii) R^3R^4N- where

R^3 and R^4 independently represent hydrogen, C_1-C_6 alkyl, amino(C_1-C_6)alkyl, (C_1-C_6)alkoxy(C_1-C_6)alkyl, or C_3-C_7 cycloalkyl; or

NR^3R^4 represents ~~heteroaryl or~~ heterocycloalkyl; and

E is hydrogen or

E is C_1-C_6 alkyl, amino(C_1-C_6)alkyl, mono or di(C_1-C_6 alkyl)amino(C_1-C_6)alkyl, or C_1-C_6alkoxy(C_1-C_6)alkyl, each alkyl portion being unsubstituted or substituted with one or more of halogen, hydroxy, C_3-C_7 cycloalkyl, or aryl~~, heterocycloalkyl, or heteroaryl~~;

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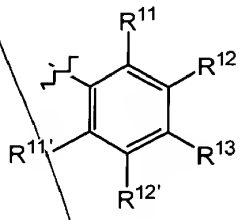
F is selected from hydrogen, halogen, hydroxy, amino, and C_1-C_6 alkyl;

G is selected from

(i) a group of the formula



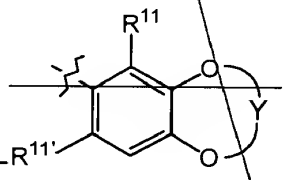
where R^{11}, $R^{11'}$, R^{12}, $R^{12'}$, and R^{13} are the same or different and are selected from

hydrogen, halogen, C_1-C_6 alkyl, hydroxy, trifluoromethyl, -OR^2, and -NR^6R^7, where

R^2, R^6 and R^7 are the same or different and are selected from hydrogen, C_1-C_6 alkyl, and C_3-C_7 cycloalkyl; or

NR^6R^7 represents ~~heteroaryl or~~ heterocycloalkyl;

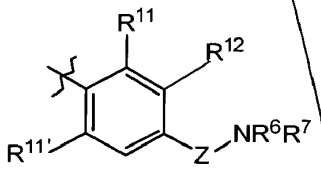
~~(ii) a group of the formula:~~



~~where Y is C_1-C_6 alkylene, and~~

~~R^{11} and $R^{11'}$ are as defined above;~~

(iii) a group of the formula:



where R^6, R^7, R^{11}, and $R^{11'}$ are as defined above; and

Z is C_1-C_6 alkylene or C_1-C_6 alkyleneoxy;

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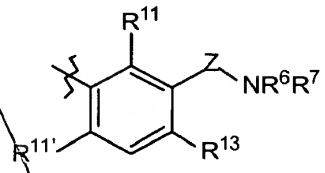
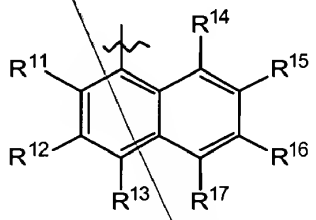
(iv) a group of the formula:



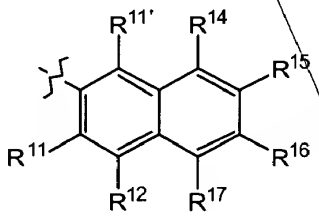
where Z, R^6, R^7, R^{11}, $R^{11'}$, and R^{13} are as defined above;

(v) a group of the formula:



where R^{11}, R^{12}, and R^{13} are as defined above, and R^{14}, R^{15}, R^{16}, and R^{17} independently carry the same definitions as R^{11}; and

(vi) a group of the formula:



where R^{11}, $R^{11'}$, R^{12}, R^{14}, R^{15}, R^{16}, and R^{17} are as defined above~~; and~~

~~(vii) a group of the formula:~~

~~where Q represents a heteroaryl group~~.

Claim 2 (Original): A compound or salt according to Claim 1 of the formula:

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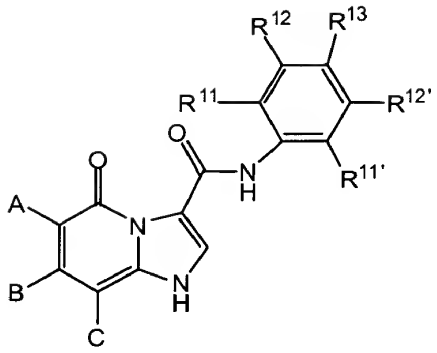
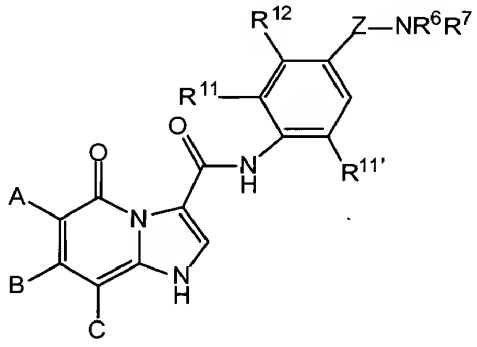


where A, B, C, R^{11}, $R^{11'}$, R^{12}, $R^{12'}$ and R^{13} are as defined in Claim 1.

Claim 3 (Cancelled).

Claim 4 (Original): A compound or salt according to Claim 1 of the formula:



where A, B, C, R^{11}, $R^{11'}$, R^{12}, Z, R^6, and R^7 are as defined in Claim 1.

Claims 5-6 (Cancelled).

Claim 7 (Original): A compound or salt according to Claim 1 of the formula:

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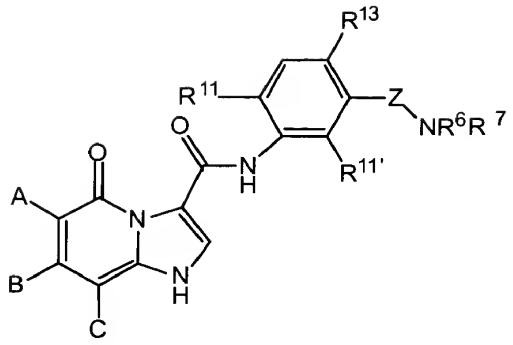
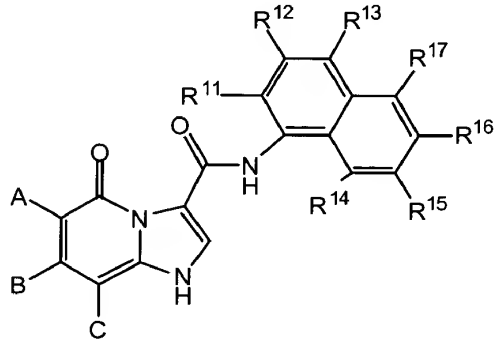


where A, B, C, R^{11}, $R^{11'}$, R^{13}, Z, R^6, and R^7 are as defined in Claim 1.

Claim 8 (Original): A compound or salt according to Claim 1 of the formula:



where A, B, C, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, and R^{17} are as defined in Claim 1.

Claim 9 (Original): A compound or salt according to Claim 1 of the formula:

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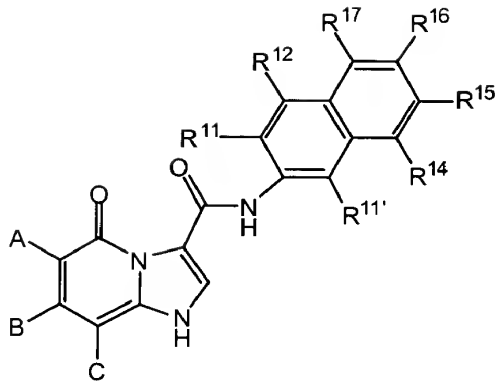
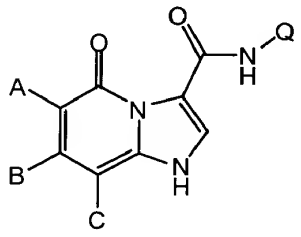


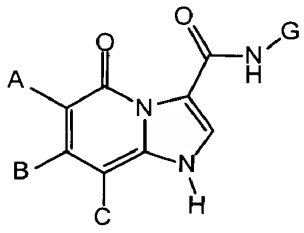
where A, B, C, R^{11}, R^{12}, $R^{11'}$, R^{14}, R^{15}, R^{16}, and R^{17} are as defined in Claim 1.

Claim 10 (Original): A compound or salt according to Claim 1 of the formula:



where A, B, C, and Q are as defined in Claim 1.

Claim 11 (Original): A compound or salt according to Claim 1 of the formula:



where A, B, C and G are as defined in Claim 1.

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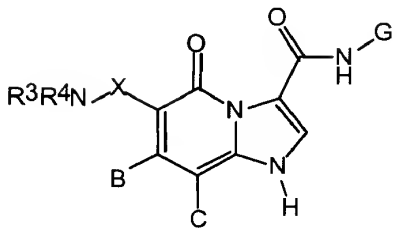
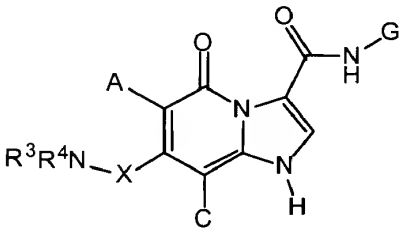
Claim 12 (Original): A compound or salt according to Claim 1 of the formula:



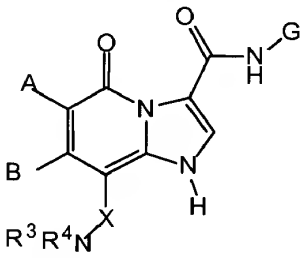
where R^3, R^4, B, C, and G are as defined in Claim 1, and X is C_1-C_6 alkylene.

Claim 13 (Original): A compound or salt according to Claim 1 of the formula:



where R^3, R^4, A, C, and G are as defined in Claim 1, and X is C_1-C_6 alkylene.

Claim 14 (Original): A compound or salt according to Claim 1 of the formula of the formula:



where R^3, R^4, A, B, and G are as defined in Claim 1, and X is C_1-C_6 alkylene.

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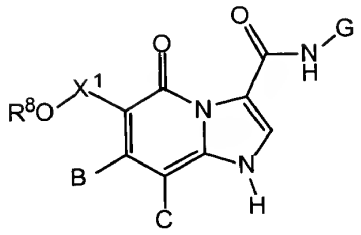
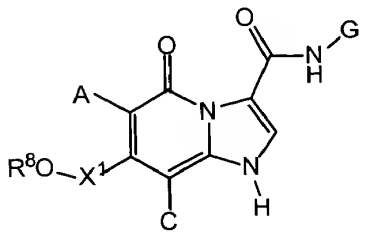
Claim 15 (Original): A compound or salt according to Claim 1 of the formula:



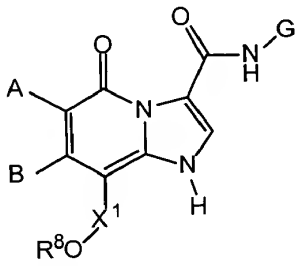
where B, C, and G are as defined in Claim 1, R^8 is defined the same as R^2, and X^1 is C_1-C_6 alkylene or C_1-C_6alkylene amino.

Claim 16 (Original): A compound or salt according to Claim 1 of the formula:



where A, C, and G are as defined in Claim 1, R^8 is defined the same as R^2, and X^1 is C_1-C_6 alkylene or C_1-C_6 alkyleneamino.

Claim 17 (Original): A compound or salt according to Claim 1 of the formula:



where A, B, and G are as defined in Claim 1, R^8 is defined the same as R^2, and X^1 is C_1-C_6 alkylene or C_1-C_6 alkyleneamino.

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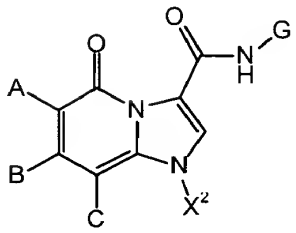
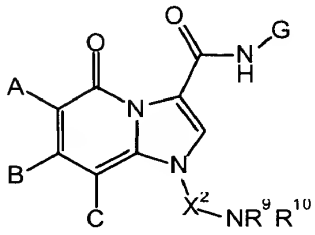
Claim 18 (Original): A compound or salt according to Claim 1 of the formula:



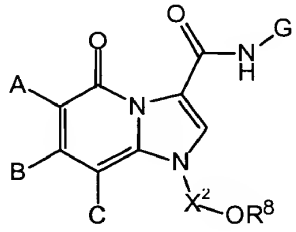
where A, B, C, G, are as defined in Claim 1, and X^2 is C_1-C_6 alkyl.

Claim 19 (Original): A compound or salt according to Claim 1 of the formula:



where A, B, C, and G are as defined in Claim 1, R^9 and R^{10} are independently defined the same as R^3 and R^4, and X^2 is C_1-C_6 alkylene.

Claim 20 (Original): A compound or salt according to Claim 1 of the formula:



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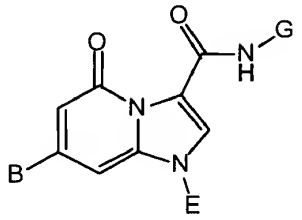
where A, B, C, G are as defined in Claim 1, R^8 is defined the same as R^2, and X^2 is C_1-C_6 alkylene.

Claim 21 (Original): A compound or salt according to Claim 1 of the formula:



where E and G are as defined in Claim 1 and B is selected from hydrogen and methyl.

Claim 22 (Original): A compound according to Claim 1, which is N-(2,5-difluorophenyl) 7-methyl-5-oxo-imidazo[1,2-a]pyridyl-3-carboxamide or a pharmaceutically acceptable salt thereof.

Claim 23 (Original): A compound according to Claim 1, which is N-Phenyl 5-oxo-imidazo[1,2-a]pyridine-3-carboxamide or a pharmaceutically acceptable salt thereof.

Claim 24 (Original): A compound according to Claim 1, which is N-(2-Fluorophenyl) 5-oxo-imidazo[1,2-a]pyridine-3-carboxamide or a pharmaceutically acceptable salt thereof.

Claim 25 (Original): A compound according to Claim 1, which is N-(2-fluoro 4-Chloro-phenyl) 5-oxo-imidazo[1,2-a]pyridine-3-carboxamide or a pharmaceutically acceptable salt thereof.

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Claim 26 (Original): A compound according to Claim 1, which is N-(2-Fluoro-3-trifluoromethylphenyl) 5-oxo-imidazo[1,2-a]pyridine-3-carboxamide or a pharmaceutically acceptable salt thereof.

Claim 27 (Original): A compound according to Claim 1, which is N-(3-Methylphenyl) 5-oxo-imidazo[1,2-a]pyridine-3-carboxamide or a pharmaceutically acceptable salt thereof.

Claim 28 (Original): A compound according to Claim 1, which is N-(4-Trifluoromethoxyphenyl) 5-oxo-imidazo[1,2-a]pyridine-3-carboxamide or a pharmaceutically acceptable salt thereof.

Claim 29 (Original): A compound according to Claim 1, which is N-(2-Fluoro-4-ethoxyphenyl) 5-oxo-imidazo[1,2-a]pyridine-3-carboxamide or a pharmaceutically acceptable salt thereof.

Claim 30 (Original): A compound according to Claim 1, which is N-(2-Fluoro-4-ethoxyphenyl) 5-oxo-imidazo[1,2-a]pyridine-3-carboxamide or a pharmaceutically acceptable salt thereof.

Claim 31 (Original): A compound according to Claim 1, which is N-[4-(2-Dimethylaminoethoxy)phenyl] 5-oxo-imidazo[1,2-a]pyridine-3-carboxamide or a pharmaceutically acceptable salt thereof.

Claim 32 (Original): A compound according to Claim 1, which is N-[4-(3-Imidazyl-1-propoxy)phenyl] 5-oxo-imidazo[1,2-a]pyridine-3-carboxamide hydrochloride or a pharmaceutically acceptable salt thereof.

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Claim 33 (Original): A compound according to Claim 1, which is N-(2-Naphthyl) 5-oxo-imidazo[1,2-a]pyridine-3-carboxamide or a pharmaceutically acceptable salt thereof.

Claim 34 (Original): A compound according to Claim 1, which is N-Phenyl 7-methyl 5-oxo-imidazo[1,2-a]pyridine-3-carboxamide or a pharmaceutically acceptable salt thereof.

Claim 35 (Original): A compound according to Claim 1, which is N-(4-Fluorophenyl) 7-methyl 5-oxo-imidazo[1,2-a]pyridine-3-carboxamide or a pharmaceutically acceptable salt thereof.

Claim 36 (Original): A compound according to Claim 1, which is N-(4-Hydroxyphenyl) 7-methyl 5-oxo-imidazo[1,2-a]pyridine-3-carboxamide or a pharmaceutically acceptable salt thereof.

Claim 37 (Original): A compound according to Claim 1, which is N-(2,4-Difluorophenyl) 7-methyl 5-oxo-imidazo[1,2-a]pyridine-3-carboxamide or a pharmaceutically acceptable salt thereof.

Claim 38 (Original): A compound according to Claim 1, which is N-(2-Fluoro-4-hydroxyphenyl) 7-methyl 5-oxo-imidazo[1,2-a]pyridine-3-carboxamide or a pharmaceutically acceptable salt thereof.

Claim 39 (Original): A compound according to Claim 1, which is N-(4-Hydroxyphenyl) 1-(N-Ethyl) 7-methyl 5-oxo-imidazo[1,2-a]pyridine-3-carboxamide or a pharmaceutically acceptable salt thereof.

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Claim 40 (Cancelled).

Claim 41 (Original): A pharmaceutical composition comprising a compound or salt according to claim 1 combined with at least one pharmaceutically acceptable carrier or excipient.

Claim 42 (Currently amended): A method for treating a central nervous system disease by ~~for~~ altering the signal-transducing activity of $GABA_A$ receptors, said method comprising contacting cells expressing such receptors with a solution comprising a compound or salt according to Claim 1 at a concentration sufficient to detectably alter the electrophysiology of the cell, wherein a detectable alteration of the electrophysiology of the cell indicates an alteration of the signal-transducing activity of $GABA_A$ receptors.

A2

Claim 43 (Original): A method according to Claim 42 wherein the detectable alteration of the electrophysiology of the cell is a change in the chloride ion conductance of the cell.

Claim 44 (Original): The method of Claim 42 wherein the cell is recombinantly expressing a heterologous $GABA_A$ receptor and the alteration of the electrophysiology of the cell is detected by intracellular recording or patch clamp recording.

Claim 45 (Original): The method of Claim 42 wherein the cell is a neuronal cell that is contacted in vivo in an animal, the solution is a body fluid, and the alteration in the

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electrophysiology of the cell is detected as a reproducible change in the animal's behavior.

Claim 46 (Original): The method of Claim 44 wherein the animal is a human, the cell is a brain cell, and the fluid is cerebrospinal fluid.

Claim 47 (Original): A method for altering the signal-transducing activity of $GABA_A$ receptors, the method comprising exposing cells expressing $GABA_A$ receptors to a compound or salt according to claim 1 at a concentration sufficient to inhibit RO15-1788 binding *in vitro* to cells expressing a human $GABA_A$ receptor.

Claim 48 (Original): A method for the treatment of anxiety, depression, a sleep disorder, or Alzheimer's dementia comprising administering an effective amount of a compound or salt of Claim 1 to a patient in need thereof.

Claim 49 (Original): A method for demonstrating the presence of $GABA_A$ receptors in cell or tissue samples, said method comprising:

(a) preparing a plurality of matched cell or tissue samples,

(b) preparing at least one control sample by contacting (under conditions that permit binding of RO15-1788 to $GABA_A$ receptors within cell and tissue samples) at least one of the matched cell or tissue samples (that has not previously been contacted with any compound or salt of Claim 1) with a control solution comprising a detectably-labeled preparation of a

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selected compound or salt of Claim 1 at a first measured molar concentration, said control solution further comprising an unlabelled preparation of the selected compound or salt at a second measured molar concentration, which second measured concentration is greater than said first measured concentration,

(c) preparing at least one experimental sample by contacting (under conditions that permit binding of RO15-1788 to $GABA_A$ receptors within cell and tissue samples) at least one of the matched cell or tissue samples (that has not previously been contacted with any compound or salt of Claim 1) with an experimental solution comprising the detectably-labeled preparation of the selected compound or salt at the first measured molar concentration, said experimental solution not further comprising an unlabelled preparation of any compound or salt of Claim 1 at a concentration greater than or equal to said first measured concentration;

(d) washing the at least one control sample to remove unbound selected compound or salt to produce at least one washed control sample;

(e) washing the at least one experimental sample to remove unbound selected compound or salt to produce at least one washed experimental sample;

(f) measuring the amount of detectable label of any remaining bound detectably-labeled selected compound or salt in the at least one washed control sample;

(g) measuring the amount detectable label of any remaining bound detectably-labeled selected compound or salt in the at least one washed experimental sample; and

(h) comparing the amount of detectable label measured in each of the at least one washed experimental sample to the

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amount of detectable label measured in each of the at least one washed control sample

wherein, a comparison that indicates the detection of a greater amount of detectable label in the at least one washed experimental sample than is detected in any of the at least one washed control samples demonstrates the presence of $GABA_A$ receptors in that experimental sample.

Claim 50 (Original): The method of Claim 49 in which the cell or tissue sample is a tissue section.

Claim 51 (Original): The method of Claim 49 in which the detectable label is a radioactive label or a directly or indirectly luminescent label.

Claim 52 (Original): The method of Claim 49 in which each cell or tissue sample is a tissue section, the detectable label is a radioactive label or a directly or indirectly luminescent label, and the detectable label is detected autoradiographically to generate an autoradiogram for each of the at least one samples.

Claim 53 (Original): The method of Claim 52 in which each measurement of the amount of detectable label in a sample is carried out by viewing the autoradiograms and the comparison is a comparison of the exposure density of the autoradiograms.

Claim 54 (Original): A package comprising a pharmaceutical composition of claim 41 in a container and further comprising indicia comprising at least one of:

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(a) instructions for using the composition to treat a patient suffering from an anxiety disorder, or

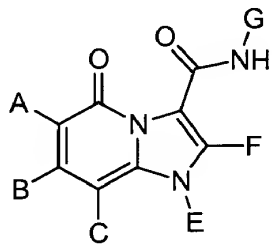
(b) instructions for using the composition to treat a patient suffering from depression, or

(c) instructions for using the composition to treat a patient suffering from a sleeping disorder.

Claim 55 (Original): A package comprising a pharmaceutical composition of claim 41 in a container and further comprising indicia comprising at least one of: instructions for using the composition to treat a patient suffering from Alzheimer's dementia or instructions for using the composition to enhance cognition in a patient.

Claim 56-63 (cancelled).

Claim 64 (Original): A process for making a compound of the formula:



or a pharmaceutically acceptable non-toxic salt thereof wherein

A, B and C independently represent hydrogen, halogen, C_1-C_6 alkyl,

wherein said C_1-C_6 alkyl is straight, branched or cyclic, contains zero, one or two double or triple bonds, and is unsubstituted or substituted with one or more substituents

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selected from hydroxy, oxo, halogen, amino, mono- or di(C_1-C_6)alkylamino, C_1-C_3 alkoxy, and C_3-C_7 cycloalkyl, C_1-C_6 alkoxy, C_1-C_6 haloalkyl, hydroxy, amino, mono- or di(C_1-C_6)alkylamino, C_3-C_7 cycloalkyl, mono- or di(C_1-C_6)alkylamino(C_1-C_6)alkyl, mono- or di(C_1-C_6)alkylamino(C_1-C_6)alkoxy, aryl(C_1-C_6)alkyl and substituted aryl(C_1-C_6)alkyl;

E is selected from hydrogen, hydroxy, C_1-C_6 alkyl, and mono- or di(C_1-C_6)alkyl amino(C_1-C_6)alkyl;

F is selected from hydrogen, halogen, hydroxy, amino, and C_1-C_6 alkyl;

G is selected from aryl and heteroaryl, each of which is optionally substituted with up to three groups independently selected from the group consisting of halogen, C_1-C_6 alkyl, C_1-C_6 alkoxy, C_1-C_6 haloalkyl, hydroxy, mono- or di(C_1-C_6)alkylamino, and C_1-C_6 alkyl substituted with one or two groups independently selected from $-OR^2$, $-NR^6R^7$, and heterocycloalkyl, where R^2, R^6 and R^7 are the same or different and represent hydrogen, C_1-C_6 alkyl, or C_3-C_7 cycloalkyl, or NR^6R^7 represents a cyclic moiety having 3-7 members.

Claim 65 (Cancelled).

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